

FLYING CROOKED

By J. S. PHILLPOTTS*

The butterfly, a cabbage white
 (His honest idiocy of flight)
 Will never now, it is too late,
 Master the art of flying straight,
 Yet has — who knows as well as I? —
 A just sense of how not to fly:
 He lurches here and here by guess
 And God and hope and hopelessness.
 Even the acrobatic swift
 Has not his flying crooked gift.

Robert Graves

The enormous area of a butterfly's wings must be there for some better purpose than advertisement to its mate. It also advertises itself to all the birds in the neighbourhood and is often attacked by them.

One advantage of these large wings is that they allow the butterfly to use relatively slow, deliberate wing beats, which are under excellent control. A meadow brown will fly through the close stems of tall grass without touching them and butterflies can sail straight through fruit cage netting and out the other side without hesitation. Both these feats require co-ordination between eye and wing of a high order.

This leads on to a flying butterfly's tactics as it is attacked by a bird. Like the slow flying enemy aeroplanes in the last war it is more manoeuvrable than they are 'it lurches here and here by gues' and they miss it over and over again. When they do manage to strike from above it closes its wings in the bird's face and the bird may remove a symmetrical portion of both wings or leave a mark as it tries to obtain a better grip and the butterfly escapes. (E. B. Ford, *Butterflies*, plate 10f and p.244). In attacks from the side only one wing is used for protection and a piece may be removed. The bird frequently attacks from the rear where the body is least well protected by the wings (apart from in front, which has its own disadvantages) but even then it usually escapes by its flying crooked gift. If only small areas of wing are missing it can avoid capture but if sufficient had been removed its agility is reduced and eventually it is caught and brought to the ground to be torn to pieces and eaten. Small butterflies are obviously at more risk from aerial attacks from birds, and in fact they usually fly near the ground.

These tactics give good defence against birds, which fly fast. (Do herons ever take butterflies on the wing? With their long necks and

*11 Little Warren Close, Guildford, Surrey.

beaks they might well do so if their paths coincided) but they are not so good against bats whose slower flight has something of the same character as the butterflies', and perhaps this is one reason why so few butterflies fly at night.

Summary

Butterflies' large wings have obvious disadvantages but two chief advantages:—

- (1) To attract mates. At a distance sight is often a better advertisement than scent, though this is disputed.
- (2) As a defence against attacks by birds. The mechanism of the latter is discussed.

Acknowledgements

I should like to thank E. B. Ford and Collins Publishers for permission to quote from *Butterflies*. I also acknowledge Robert Graves' permission to include the poem "Flying Crooked" from his *Collected Poems*.

TWO FURTHER RECORDS OF *BARYPEITHES SULCIFRONS* (BOHEMAN) (COL.: CURCULIONIDAE) FROM WEST CUMBRIA. — My first record of *Barypeithes sulcifrons* (Boheman) from Cumbria was based on one dead specimen found at Silecroft, (1979, *Entomologist's Record*, 91: 27). I can now add two further localities for this species from the county. Several live adults were taken by general sweeping along the edge of a field near Kirksanton Haws, SD13/79 on June 16th 1980. The vegetation at this site consisted mainly of grass, with a good deal of *Rumex acetosella* L. and *R. acetosa* L. My second locality was on Black Come, SD13/84. On March 13th 1982 I found one specimen resting on the undersurface of a small flat stone lying among short grass turf and Bilberry, *Vaccinium myrtillus* L., at about 411 metres on a steep south east facing slope, above Black Crag.

Some remains of dead specimens of *B. sulcifrons* were also found at the base of other bulberry plants growing close by. It is possible that these individuals may have fallen prey to some large spiders which were observed under stones in the immediate vicinity.

On a previous visit to Black Combe I collected a few other interesting beetles and among these was the typical montane weevil, *Otiorynchus nodosus* (Muller, O. F.). On 4th April, 1980, I took a few individuals from under small stones and also at the base of heather, *Calluna vulgaris* (L.) Hull, in an area of boulders and sparse vegetation near the summit at about 480 metres. *O. nodosus* was recorded from the county by F. H. Day, (1923, *Trans. Carlisle Nat. Hist. Soc.*, 3: 99) and specimens in the Day collection held in the Tullie House Museum at Carlisle are from Grisedale Pike, (NY12), Cumrew Fell, (NY55) and Crossfell. So far I have not discovered any published records of *O. nodosus* from the extreme west of the county. — R. W. J. READ, 43 Holly Terrace, Hensingham, Whitehaven, Cumbria CA28 8RF.